Health Care for the Homeless

INFORMATION RESOURCE CENTER

 $(888) 439-3300 \bullet (518) 439-7612$

Bibliography #4

Morbidity and Mortality Among Homeless and Low-Income Children

April 2004

Books and Journal articles listed herein are available from your local library, medical library, or through inter-library loan. If you have difficulty locating any of the materials listed in this bibliography, please contact the Center at the address below.

2003

Hillemeier MM, Lynch J, Harper S, Raghunathan T, Kaplan GA. **Relative or absolute standards for child poverty: A state-level analysis of infant and child mortality**. American Journal of Public Health 93(4): 652-657, 2003.

In this article, the author compares the associations of state-referenced and federal poverty measures with states' infant and child mortality rates. Based on compressed mortality and Current Population Survey data, the authors examined the relationships between (1) mortality and state-referenced poverty, and (2) the percentage of children below the federal poverty level. The article states that state-referenced poverty was not associated with mortality among infants or children, whereas poverty as defined by national standards was strongly related to mortality. The authors conclude that infant and child mortality is more closely tied to families' capacity for meeting basic needs than to relative position within the state's economic hierarchy (authors).

Marcin JP, Schembri MS, He J, Romano PS. A population-based analysis of socioeconomic and insurance status and their relationship with pediatric trauma hospitalization and mortality rates. American Journal of Public Health 93(3): 461-471, 2003.

This article is based on a study that investigates the socioeconomic disparities in injury hospitalization rates and severity-adjusted mortality for pediatric trauma. The authors used 10 years if pediatric trauma data from Sacramento, California to compare trauma hospitalization rates, trauma mechanism and severity, and standardized hospital mortality across socioeconomic strata. The article states that children from lower-socioeconomic status (SES) communities had higher injury hospitalization and mortality rates, but did not have higher severity-adjusted mortality. The authors assert that higher injury mortality rates among children in lower SES communities in Sacramento County are explained by a higher incidence of trauma and more fatal mechanisms of injury, not by greater injury severity or poorer inpatient care (authors).

Ross DC, Cox L. Preserving recent progress on health coverage for children and families: New tensions emerge. A 50 state update on eligibility, enrollment, renewal and cost-sharing practices in Medicaid and SCHIP. Washington, DC: Kaiser Family Foundation, 2003.

This report includes the latest survey of eligibility rules and enrollment and renewal procedures in all 50 states and the District of Columbia in their Medicaid and SCHIP programs for children and parents. The authors discuss the changes states implemented between January 2002 and April 2003. The current survey also solicited information about states' premiums and cost-sharing practices. The study surveyed all fifty states and the District of Columbia about their current Medicaid and SCHIP eligibility rules, as well as enrollment and renewal procedures. The report presents the good news that most states are being fairly protective of the Medicaid and SCHIP programs even in light of the current state fiscal crises (authors). Available From: Kaiser Family Foundation, 1330 G Street NW, Washington, DC 20005, (202) 347-5270, www.kff.org/KCMU.

Weller W, Minkovitz C, Anderson G. Utilization of medical and health-related services among schoolage children and adolescents with special health care needs. Pediatrics 112(3): 593-603, 2003.

The objective of this study was to determine how socio-demographic factors and type of insurance influence use of medical and health-related services by children with special health care needs (CSHCN), after controlling for need. It concluded that factors in addition to need influenced medical and health-related service use by CSHCN. Differences in the scope of benefits covered by public insurance compared with private insurance may influence utilization of medical and especially health-related services. Attention is needed to ensure that CSHCN who are racial/ethnic minorities or are from less educated families have access to needed services. Future studies should determine whether these patterns have changed over time. (authors)

2002

Egan, J. The hidden lives of homeless children. New York Times Magazine: March 24, 2002.

This article discusses the plight of homeless families living in New York City. A typical homeless child is under five years old, very poor and living with a sibling and a single mother. The mother may lack the education or job skills to lift her out of poverty; often, she has been the victim of domestic violence. Compounding such children's precarious circumstances are two long-term economic trends: stagnant or falling wages coupled with a rise in housing prices. While the impact of homelessness on these children is difficult to distinguish from the many other hardships of poverty, there is evidence that homeless children have more health problems, more hospitalizations and more developmental problems than poor children who have never been homeless. Homeless children are more likely to wind up separated from their parents for periods, either with other relatives or in foster care. Children who experience homelessness are also more likely to become homeless as adults (author).

Karr, C. Homeless children: What every health care provider should know. Nashville, TN: Health Care for the Homeless Clinicians' Network, 2002.

This is an online resource for health care providers that offer information on how to treat children who may be at risk or who are currently experiencing homelessness. It includes information on recognizing homelessness and the risks of homelessness in families with children, understanding the specific health problems of children experiencing homelessness, modifying health care plans and prevention strategies to account for the conditions of homelessness, and finding resources for homeless patients and their families (authors).

Kinney PL, Northridge ME, Chew GL, Gronning E, Joseph E, Correa JC, Prakash S, Goldstein I. **On the front lines: An environmental asthma intervention in New York city**. American Journal of Public Health 92(1): 24-25, 2002.

Asthma is now the leading cause of school absence among children of color in impoverished urban neighborhoods. Environmental interventions have the potential to augment clinical approaches to asthma management by directly reducing exposure to environmental triggers (e.g., cockroaches, rodents, and mold). We implemented an apartment-based intervention to reduce exposures to indoor allergens among children living with asthma in 2 areas in New York City with rates of asthma morbidity and mortality that rank among the highest in the United States (authors).

Weinreb L, Wehler C, Perloff J, Scott R, Hosmer D, Sagor L, Gundersen C. **Hunger: Its impact on children's health and mental health.** Pediatrics 110(4), 2002.

OBJECTIVE: Hunger, with its adverse consequences for children, continues to be an important national problem. Previous studies that document the deleterious effects of hunger among children cannot distinguish child from family hunger and do not take into account some critical environmental, maternal, and child variables that may influence child outcomes. This study examines the independent contribution of child hunger on children's physical and mental health and academic functioning, when controlling for a range of environmental, maternal, and child factors that have also been associated with poor outcomes among children. METHODS: With the use of standardized tools, comprehensive demographic, psychosocial, and health data were collected in Worcester. Massachusetts, from homeless and low-income housed mothers and their children (180 preschool-aged children and 228 school-aged children). Mothers and children were part of a larger unmatched case-control study of homelessness among female-headed households. Hunger was measured by a set of 7 dichotomous items, each asking the mother whether she has or her children have experienced a particular aspect of hunger during the past year--1 concerns food insecurity for the entire family, 2 concern adult hunger, and 4 involve child hunger. The items, taken from the Childhood Hunger Identification Project measure, are summed to classify the family and divided into 3 categories: no hunger, adult or moderate child hunger, or severe child hunger (indicating multiple signs of child hunger). Outcome measures included children's chronic health condition count using questions adapted from the National Health Interview Survey, Child Health Supplement, and internalizing behavior problems and anxiety/depression, measured by the Child Behavior Checklist. Additional covariates included demographic variables (ie, age, gender, ethnicity, housing status, number of moves, family size, income), low birth weight, child life events (ie, care and protection order, out of home placement, abuse, severe life events count), developmental problems (ie, developmental delay, learning disability, emotional problems), and mother's distress and psychiatric illness. Multivariate regression analyses examined the effect of child hunger on physical and mental health outcomes. RESULTS: The average family size for both preschoolers and school-aged children was 3; about one third of both groups were white and 40% Puerto Rican. The average income of families was approximately \$11 000. Among the school-aged children, on average 10 years old, 50% experienced moderate child hunger and 16% severe child hunger. Compared with those with no hunger, school-aged children with severe hunger were more likely to be homeless, have low birth weights, and have more stressful life events when compared with those with no hunger. School-aged children with severe hunger scores had parent-reported anxiety scores that were more than double the scores for children with no hunger and significantly higher chronic illness counts and internalizing behavior problems when compared with children with no hunger. There was no relationship between hunger and academic achievement. Among preschoolaged children, who averaged 4 years of age, 51% experienced moderate child hunger and 8% severe child hunger. For preschoolers, compared with children with no hunger, severe hunger was associated with homelessness, more traumatic life events, low birth weight, and higher levels of chronic illness and internalizing behavior problems. Mothers of both preschoolers and school-aged children who reported severe hunger were more likely to have a lifetime diagnosis of posttraumatic stress disorder. For school-aged children, severe hunger was a significant predictor of chronic illness after controlling for housing status, mother's distress, low birth weight, and child live events. For preschoolers, moderate hunger was a significant predictor of health conditions while controlling for potenns while controlling for potential explanatory factors. For both preschoolers and school-aged children, severe child hunger was associated with higher levels of internalizing behavior problems. After controlling for housing status, mother's distress, and stressful life events, severe child hunger was also associated with higher reported anxiety/depression among school-aged children. CONCLUSION: This study goes beyond previous research and highlights the independent relationship between severe child hunger and adverse physical health and mental health outcomes among lowincome children. Study findings underscore the importance of clinical recognition of child hunger and its outcomes, allowing for preventive interventions and efforts to increase access to food-related resources for families.

Wood P, Smith L, Romero D, Bradshaw P, Wise P, Chavkin W. **Relationships between welfare status, health insurance status, and health and medical care among children with asthma**. American Journal of Public Health 92(9): 1446-1452, 2002.

This study evaluated the relationship between health insurance and welfare status and the health and medical care of children with asthma. Parents of children with asthma aged two to twelve years were interviewed at six urban clinical sites and two welfare offices. The article states that children whose families had applied for but were denied welfare had more asthma symptoms than did children whose families had had no contact with the welfare system. According to the authors, poorer mental health in parents was associated with more asthma symptoms and higher rates of health care use in their children. Parents of uninsured children identified more barriers to health care than did parents whose children were insured. The article concludes that children whose families have applied for welfare and children who are uninsured are at high risk medically and may require additional services to improve health outcomes (authors).

2001

Berti LC, Zylbert S, Rolnitzky L. Comparison of health status of children using a school-based health center for comprehensive care. J Pediatr Health Care 15(5): 244-250, 2001.

OBJECTIVE: Our objective was to compare health problems and medical coverage of homeless and housed children who used a school-based health center (SBHC) for comprehensive care. METHODS: Medical charts of homeless children and housed children seen for comprehensive care at an SBHC in New York City during the 1998-99 school year were systematically reviewed and compared. RESULTS: Controlled for ethnicity and medical coverage, homeless children were 2.5 times as likely to have health problems and 3 times as likely to have severe health problems as housed children. The most common health problems identified in the homeless population were asthma (33%), vision (13%), mental health (9%), and acute problems (8%). Lack of medical coverage was evident in 58% of homeless children, compared with 15% of housed children. CONCLUSION: Study findings identify homeless children as being at increased risk for health problems and lack of medical coverage. These findings support use of an SBHC for comprehensive care by underserved segments of the population and a need for increased vigilance on the part of health care providers caring for homeless children.

Kenney, G. and Haley, J. Why aren't more uninsured children enrolled in medicaid or SCHIP? Washington, D.C.: The Urban Institute, 2001.

This study from the Urban Institute's Assessing the New Federalism project found that knowledge gaps continue to be substantial barriers to enrollment in SCHIP and Medicaid. The study used data from the 1999 National Survey of America's Families, a nationally representative survey that over-samples the low-income population and provides state-specific data on 13 states, to examine issues surrounding Medicaid or SCHIP enrollment. The study found that knowledge gaps constituted a primary barrier to enrollment for one-third of low-income uninsured children, and that administrative hassles were a primary barrier to enrollment for another 10 percent of low-income uninsured children. However, 22 percent of low-income uninsured children had parents who indicated that public health insurance coverage was not wanted or needed, and another 18 percent who were uninsured at the time of the survey had been enrolled in Medicaid/SCHIP at some point during the past year.

National Coalition for the Homeless. **Homeless families with children**. Washington, DC: National Coalition for the Homeless, 2001.

This fact sheet focuses on the devastating effects homelessness has on families, from physical and emotional health, to education and development. The authors discuss the dimensions, causes and consequences of family homelessness, and provide an overview of policy issues and a list of resources for further study (authors). Available From: National Coalition for the Homeless, 1012 Fourteenth Street, NW, #600, Washington, DC 20005-3471, (202) 737-6444, www.nationalhomeless.org.

Sharfstein, J, Sandel, M, Kahn, R, Bauchner, H. Is child health at risk while families wait for housing vouchers? American Journal of Public Health 91(8): 1191-1192, 2001.

In this study, the families surveyed were due to receive Section 8 vouchers from the Boston Housing Authority in the summer of 1999. The study directly assessed the risks facing families poised to benefit from a policy intervention: the Section 8 voucher. Families reported high rates of housing hazards in their pre-Section 8 living conditions. The study concludes that policymakers cannot ignore the growing evidence that housing policies have important health consequences and suggests that expanding access to vouchers may immediately improve the health of America's children.

2000

American Public Health Association. **American Journal of Public Health.** American Journal of Public Health 90(12): 2000.

This entire issue deals with the issues of health care systems and health insurance mostly in relationship to children with special health care needs.

Byck GR. A comparison of the socioeconomic and health status characteristics of uninsured, State Children's Health Insurance Program-eligible children in the United States with those of other groups of insured children: Implications for policy. Pediatrics, 106(1 Pt 1):14-21, July 2000.

OBJECTIVES: To describe the sociodemographic and health status characteristics of the national uninsured, State Children's Health Insurance Program (SCHIP)-eligible population, and to compare this population with Medicaid-enrolled children, privately insured children, and privately insured children who have family income in the SCHIP eligibility range. PROCEDURES: Data were analyzed for 50 950 children 0 to 18 years of age included in the 1993 and 1994 National Health Interview Surveys. The survey obtained information on insurance coverage and sociodemographic and health status measures. Analyses were conducted to identify the relationships between SCHIP eligibility and sociodemographic and health status characteristics. Analyses were conducted to assess the independent association of the sociodemographic and health status variables with the likelihood of being uninsured, SCHIP-eligible. PRIMARY FINDINGS: SCHIP children exhibit markedly different socioeconomic and health status characteristics than do both Medicaid- enrolled and privately insured children, although these differences are less significant in privately insured children. SCHIP children more often live with college-educated (39.4%) and employed adults (91.2%) than do Medicaid-enrolled children (23.0% and 53.9%, respectively). However, SCHIP children live with

college-educated and employed adults less than do all privately insured children (66.7% and 96.9%, respectively) and privately insured/same-income children (57.8% and 97.0%, respectively). Parents of SCHIP-eligible children are also disproportionately self-employed or employed in industries (e.g., retail trade) and occupations in which health insurance coverage is less available or affordable. SCHIP-eligible children are also two times more likely to be adolescents and 1 1/2 times more likely to be in excellent health than Medicaid-eligible children. Compared with privately insured children, SCHIP-eligible children are nearly 3 times more likely to be Hispanic and nearly two times more likely to be rated in fair or poor health. CONCLUSIONS: Uninsured, SCHIP-eligible children are substantially different from children in these groups, particularly compared with Medicaid-enrolled children. These differences need to be taken into account for policies and programs intended to increase health insurance coverage and access to health care.

Corrarino JE, Walsh PJ, Boyle ML, Anselmo D. **The Cool Kids Coalition.** MCN Am J Matern Child Nurs, 25(1):10-6; quiz 17, Jan-Feb 2000.

The Cool Kids Coalition was initiated as a community response to more than 214 hospitalizations of children under the age of five for burns over a 6-year period in one township in Long Island, NY. The coalition was started by public health nurses in partnership with the local chapter of the National Safe Kids Campaign. Goals included: 1. Parent education regarding scald burn prevention; 2. Development of innovative interventions for those at risk; and 3, development of innovative community approaches to scald prevention. Coalition members had diverse backgrounds and the coalition integrated non-traditional partners in injury control. The coalition doubled in size due to overwhelming community interest, growing within a few months from an initial group of 15 to a well-represented group of 30. Innovative programs were implemented that reached more than 3,000 parents, both in the community and home. Teaching was conducted with parents in the target population in Head Start centers, homeless shelters, the home, libraries, childcare centers, a shelter for teen parents, etc. Member agencies incorporated the booklet and materials into their individual programs. The development of the Cool Kids Coalition illustrates the power of nursing in community health.

Craft-Rosenbeg, M, Powell, SR, Culp, K. **Health status and resources of rural homeless women and children.** Western Journal of Nursing Research 22(8): 863-878, 2000.

The purpose of this research is to describe the health status and health resources for women and children who are homeless in a Midwestern rural community. A group of 31 rural homeless women in a shelter participated in the study by answering questions on the Rural Homeless Interview developed by the investigators. The findings revealed higher than expected rates of illness, accidents, and adverse life events, with the incidence of substance abuse and mental illness being comparable to data from other homeless populations. The data on children were omitted by lack of knowledge on the part of their mothers. Some mothers reported that their children were in foster care, had been adopted, or were being cared of by others. The inability to access health and dental care was reported by half of the participants (authors).

Mouradian WE, Wehr E, Crall JJ. **Disparities in children's oral health and access to dental care.** JAMA, 24(20):2625-31, Nov 22-9, 2000.

Dental caries can be prevented by a combination of community, professional, and individual measures including water fluoridation, professionally applied topical fluorides and dental sealants, and use of fluoride toothpastes. Yet, tooth decay is the most common chronic disease of childhood. Dental care is the most

prevalent unmet health need in US children with wide disparities existing in oral health and access to care. Only 1 in 5 children covered by Medicaid received preventive oral care for which they are eligible. Children from low income and minority families have poorer oral health outcomes, fewer dental visits, and fewer protective sealants. Water fluoridation is the most effective measure in preventing caries, but only 62% of water supplies are fluoridated, and lack of fluoridation may disproportionately affect poor and minority children. Childhood oral disease has significant medical and financial consequences that may not be appreciated because of the separation of medicine and dentistry. The infectious nature of dental caries, its early onset, and the potential of early interventions require an emphasis on preventive oral care in primary pediatric care to complement existing dental services. However, many pediatricians lack critical knowledge to promote oral health. We recommend financial incentives for prioritizing Medicaid Early and Periodic Screening, Diagnostic, and Treatment dental services; managed care accountability; integration of medical and dental professional training, clinical care, and research; and national leadership.

Partington S, Nitzke S, Csete J. **The prevalence of anemia in a WIC population: A comparison by homeless experience.** J Am Diet Assoc 100(4):469-71, April 2000. Erratum in: J Am Diet Assoc, 100(6):629, June 2000.

Stein JA, Lu MC, Gelberg L. **Severity of homelessness and adverse birth outcomes.** Health Psychol, 19(6):524-34, Nov 2000.

Predictors and the prevalence of adverse birth outcomes among 237 homeless women interviewed at 78 shelters and meal programs in Los Angeles in 1997 were assessed. It was hypothesized that they would report worse outcomes than national norms, that African Americans would report the worst outcomes because of their greater risk in the general population, and that homelessness severity would independently predict poorer outcomes beyond its association with other adverse conditions. Other predictors included reproductive history, behavioral and health-related variables, psychological trauma and distress, ethnicity, and income. African Americans and Hispanics reported worse outcomes than are found nationally, and African Americans reported the worst outcomes. In a predictive structural equation model, severity of homelessness significantly predicted low birth weight and preterm births beyond its relationship with prenatal care and other risk factors

Willis E. School-based/school-linked health centers expanding points of access. WMJ, 99(1):44-7, 2000.

Health providers and leaders in urban Milwaukee collectively acted to expand school-based health services to children attending Milwaukee Public Schools (MPS). This School-Based/School-Linked Health Centers' (SB/SLHCs) Collaboration was initiated to increase points of access for children, primarily to working-poor families, through mobilizing community resources among local leaders and statewide health systems. Systematic steps such as needs assessment, sharing data, seeking funds and prioritization of school-based sites facilitated the establishment of more than 30 additional SB/SLHCs. This has resulted in approximate 700% increase in school-based health care and health promotion services. This collaboration illustrates how communities and health care systems can effectively advocate and impact local services to benefit a population having high social risk factors. As welfare reform efforts evolve, SB/SLHCs have significantly advanced access to mainstream health services through effective local collaborations.

1999

The Better Homes Fund. **America's homeless children: New outcasts.** Newton, MA: The Better Homes Fund, 1999.

This report examines the current status of homeless children in the United States. The report details the impact homelessness can have on children and their families, and examines the prevalence of negative events in their lives. The report also examines the numbers of homeless children, which the author estimates at one million. The report focuses on the problems of homeless children with relation to health, school, and family. Recommendations and potential AVAILABLE FROM: The Better Homes Fund, ATTN: Policy Department, 181 Wells Avenue, 3rd Floor, Newton Centre, MA 02459, (617) 964-3834.

Buckner JC, Bassuk EL, Weinreb LF, Brooks MG. Homelessness and its relation to the mental health and behavior of low-income school-age children. Dev Psychol, 35(1):246-57, Jan 1999.

This study examined the relationship between housing status and depression, anxiety, and problem behaviors among children age 6 and older who were members of low-income, single-parent, female-headed families. Participants were 80 homeless and 148 never homeless children living in Worcester, Massachusetts. Children in both groups had recently been exposed to various severe stressors. Mother-reported problem behaviors were above normative levels for both homeless and poor housed youths but self-reported depression and anxiety were not. Controlling for other explanatory variables, housing status was associated with internalizing problem behaviors but not with externalizing behaviors. Among homeless youths, internalizing behavior problems showed a positive but curvilinear relationship with number of weeks having lived in a shelter. Housing status was not associated with self-reported depression and anxiety. Findings are discussed in terms of their implications for programmatic interventions and in light of recent welfare reform.

San Agustin M, Cohen P, Rubin D, Cleary SD, Erickson CJ, Allen JK. The Montefiore community children's project: A controlled study of cognitive and emotional problems of homeless mothers and children. J Urban Health, 76(1):39-50, March 1999.

OBJECTIVES: This study compares the prevalence of emotional, academic, and cognitive impairment in children and mothers living in the community with those living in shelters for the homeless. METHOD: In New York City, 82 homeless mothers and their 102 children, aged 6 to 11, recruited from family shelters were compared to 115 non-homeless mothers with 176 children recruited from classmates of the homeless children. Assessments included standardized tests and interviews. RESULTS: Mothers in shelters for the homeless showed higher rates of depression and anxiety than did non-homeless mothers. Boys in homeless shelters showed more academic problems than did non-homeless children. CONCLUSION: Study findings suggest a need among homeless children for special attention to academic problems that are not attributable to intellectual deficits in either children or their mothers. Although high rates of emotional and behavioral problems characterized poor children living in both settings, boys in shelters for the homeless may be particularly in need of professional attention.

Zima BT, Bussing R, Bystritsky M, Widawski MH, Belin TR, Benjamin B. **Psychosocial stressors among sheltered homeless children: Relationship to behavior problems and depressive symptoms**. Am J Orthopsych, 69(1):127-33, Jan 1999.

Level of exposure to severe psychosocial stressors was assessed among homeless children in emergency family shelters in an urban locale. The relationship between such exposure and child mental health problems was then investigated, along with the effects of adult family social support. Implications of the findings are discussed.

1998

Black MM, Krishnakumar A. Children in low-income, urban settings: Interventions to promote mental health and well-being. Amer Psychol, 53(6):635-46, 1998.

This article is a review of literature on mental health interventions for children in low-income, urban settings. While the urban environment provides unique political, cultural, economic, and educational opportunities for children and families, it may also have a negative impact on the mental health and well being of children and adolescents. This is particularly true when they are exposed to settings with high rates of crime, violence, delinquency, substance use, abuse, and poverty. Psychologists are well suited to intervene in problems in these areas, but most psychological services have been directed to children who are experiencing problems. There has been less focus on population-based or preemptive interventions. This review presents 11 recommendations for urban interventions that build on individual, family, and community strengths to promote the mental health and well being of urban children and adolescents.

Bureau of Primary Health Care. **Health care access for homeless children.** Bethesda, MD: Bureau of Primary Health Care, Feb 1998.

This fact sheet provides information surrounding: (1) the health care needs of homeless children, (2) homeless children's access to health care; and (3) what works to get and keep homeless children in health care, including expanding community-based health care and AVAILABLE FROM: Office of Communications, HRSA, 5600 Fishers Lane, Room 14-45 Rockville, MD 20857. Phone: (301) 443-3376. Fax: (301) 443-1989.

Conrad BS. Maternal depressive symptoms and homeless children's mental health: Risk and resiliency. Arch Psych Nurs, 12(1):50-8, 1998.

This study examined the relationship between maternal depressive symptoms and child mental health in a sample of homeless mothers and their preschool children. Thirty homeless mothers with at least one preschool child who were residing in a shelter were surveyed. The rate of depressive symptoms in the mothers, as determined by the Center for Epidemiological Studies Depression Scale, was extremely high. However, 70% of the children in this sample had no behavior problems, a rate consistent with homeless children, but low when compared to the population (94%). The data suggests mental health services for homeless mothers and their young children are needed. The adaptation of these young children reflects resiliency to extraordinary stressors and provides a unique opportunity to understand child resiliency.

Cumella S, Grattan E, Vostanis P. The mental health of children in homeless families and their contact with health, education and social services. Health Soc Care Comm 6(5): 331-341, 1998.

Previous research indicates that children in homeless families have a high risk of physical and mental illness. This study reports the initial stage of a longitudinal research programme to measure the prevalence of psychiatric disorders among parents and children in homeless families. A sample of parents in 113 homeless families were interviewed within 2 weeks of admission to seven homeless centres in the City of Birmingham, and compared with a sample of 29 low-income families who were not homeless. Both sets of interviews used the Child Behaviour Checklist (CBCL), the Communication Domain of the Vineland Adaptive Behaviour Scales (VABS), the General Health Questionnaire (GHQ), the Interview Schedule for Social Interaction (ISSI), and height and weight percentiles. A sub-sample of children was also interviewed. The results indicate that 85% of families became homeless because of domestic or neighbourhood violence, that in 54% of families in homelessness coincided with the separation of the partners, and that 49% of mothers had current psychiatric morbidity. Children in homeless families had delayed communication and higher mean scores for mental health problems than the comparison sample. Homeless children were also more likely to have had histories of abuse, and less likely to have attended school or nursery school since becoming homeless. Homeless families had high rates of contact with primary healthcare and social services, but few had been in contact with specialist child and adolescent mental health services. These results indicate a need for a coordinated action by housing, social services, education, health services, and the police to prevent families from becoming homeless by protecting victims of domestic and neighborhood violence from further violence and intimidation. Hence the need to rapidly re-house into permanent accommodation those who do become homeless to maintain education for their children, and to ensure that such families have access to effective social support and healthcare.

Garcia Coll C, Buckner JC, Brooks MG, Weinreb LF, Bassuk EL. **The developmental status and adaptive behavior of homeless and low-income housed infants and toddlers**. Am J Public Health, 88(9):1371-4, Sept 1998.

OBJECTIVES: This study describes the development status of 127 homeless and 91 low-income housed infants and toddlers. METHODS: The Bayley Scales of Infant Development and the Vineland Screener were used to gather data. RESULTS: There were no differences between homeless and low-income housed children. However, younger children in both groups performed better than the older children on most summary scores. CONCLUSIONS: Homeless and low-income housed children did not differ in their cognitive and motor skills. However, older children scored lower than younger children on most measures of development status, suggesting that the cumulative effects of poverty may increase with time.

Menke EM. **The mental health of homeless school-age children**. J Child Adolesc Psychiatr Nurs, 11(3):87-98, July-Sept 1998.

PROBLEM: The mental health of homeless school-age children. METHODS: A convenience sample of 46 homeless children between the ages of 8 and 12 years completed the Children's Depression Inventory (CDI) and each child's mother completed the Child Behavior Checklist (CBCL). FINDINGS: Fifty-seven percent of the children had depressive symptoms and 26% needed additional evaluation for mental health problems. Overall, the CDI and CBCL scores indicated that neither gender nor ethnicity, are not related to the children's mental health. CONCLUSIONS: The mental health of homeless school-age children should be assessed, as they may be at risk for mental health problems.

Menke EM, Wagner JD. A comparative study of homeless, previously homeless, and never homeless school-aged children's health. Issues Compr Pediatr Nurs, 20(3):153-73, July-Sept 1998.

The purpose of this cross-sectional study was to compare the mental health, physical health, and healthcare practices of homeless, previously homeless, and never homeless poor school-aged children. The sample was comprised of 134 children who ranged in age from 8 to 12 years. The children participated in health assessments and completed two psychometric tests: the Children's Depression Inventory (CDI) (Kovacs, 1985) and the Revised Children's Manifest Anxiety Scale (RCMAS) (Reynolds & Richmond, 1985). Their mothers completed the Child Behavior Problem Checklist (CBCL) (Achenbach, 1991) and participated in an interview. The homeless (n=67), previously homeless (n=30), and never homeless children (n=37) were similar in regard to their health assessment findings, reported health problems, healthcare practices, and CBCL scores. The proportions of homeless and previously homeless children with CDI scores in the clinical range were significantly greater than the never homeless poor children. The homeless children had significantly higher anxiety scores than the previously homeless and never homeless children. All three groups of children were at risk for physical and mental health problems; however, the findings suggest that school-aged children who experience homelessness may be at greater risk for depression and anxiety than never homeless poor children.

Moss NE, Carver K. The effect of WIC and Medicaid on infant mortality in the United States. American J Publ Health, 88(9):1354-61, Sept 1998.

OBJECTIVES: This study examined the impact of participation in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and Medicaid on risk of infant death in the United States. METHODS: The 1998 National Maternal and Infant Health Survey was used to consider the risk of endogenous and exogenous deaths among infants of women participating in WIC and Medicaid during pregnancy and the infant's first year. RESULTS: Participation in the WIC program during pregnancy and infancy was associated with a reduced risk of endogenous and exogenous infant deaths. The risk of endogenous death among infants whose mothers participated in Medicaid during pregnancy was equal to that of the privately insured. Uninsured infants faced higher risks of endogenous death. CONCLUSIONS: These results show that it is important to consider the net effect of WIC and Medicaid participation and to differentiate both the timing of program receipt and cause of death. Evidence suggests that WIC and Medicaid programs have beneficial effects for poor women and their infants.

Simms MD. **Medical care of children who are homeless or in foster care**. Curr Opin Pediatr, 10(5), Oct 1998.

The number of children who are homeless or in foster care has risen dramatically during the past two decades. Poverty, substance abuse, lack of education and employment, and the failure of the social "safety net" to catch all those in need of support and financial assistance are root causes of this increase. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, popularly know as the "welfare reform" act, will likely have a powerful impact on levels of child poverty in the future and place even greater numbers of children at risk for becoming homeless or entering foster care over the next decade. Recent studies provide increased understanding of the health care and educational needs of children who are homeless or in foster care.

Tenner AD, Trevithick LA, Wagner V, Burch R. Seattle YouthCare's prevention, intervention, and education program: A model of care for HIV-positive, homeless, and at-risk youth. J Adolesc Health, 23(2 Suppl):96-106, Aug 1998.

YouthCare's project for youth who are human immunodeficiency virus (HIV)-positive or at high risk for becoming HIV positive is one of 10 supported by Special Projects of National Significance Program, HIV/Acquired Immunodeficiency Syndrome Bureau, Health Resources and Services Administration. Throughout its 23-year history, YouthCare has focused on serving runaway, homeless, sexual minority, and other youth "on the margins." To respond effectively to the needs of these youth, YouthCare has developed creative service approaches including involving youth in program design and taking the programs to where the youth live. Building on this experience, the agency developed a continuum of services which has provided care to 906 youth, including 37 who are HIV positive. The five major elements of the model include: (a) youth-specific HIV antibody test counseling, (b) outreach, (c) intensive case management for HIV-positive youth, (d) prevention services for youth at high risk of HIV infection, and (e) peer involvement. Quantitative evaluation helped in identifying youth served by the project (e.g., over one third self-identify as a sexual minority) and the sites at which services should be provided. Preliminary results from qualitative evaluations have stressed the importance of teamwork in designing clinical interventions and providing support to direct-service staff. This report's conclusion stresses that case management for this population, even though time and resource-intensive, is effective, and that services need to be flexible and tailored to each client's needs.

Vostanis P, Grattan E, Cumella S. **Mental health problems of homeless children and families: Longitudinal study.** BMJ, 316(7135):899-902, March 21, 1998.

OBJECTIVE: To establish the mental health needs of homeless children and families before and after rehousing. DESIGN: Cross sectional, longitudinal study. SETTING: City of Birmingham. SUBJECTS: 58 rehoused families with 103 children aged 2-16 years and 21 comparison families of low socioeconomic status in stable housing, with 54 children. OUTCOME MEASURES: Children's mental health problems and level of communication; mothers' mental health problems and social support one year after re-housing. RESULTS: Mental health problems remained significantly higher in re-housed mothers and their children than in the comparison group (mothers 26% v 5%; children 39% v 11%. Homeless mothers continued to have significantly less social support at follow up. Mothers with a history of abuse and poor social integration were more likely to have children with persistent mental health problems. CONCLUSIONS: Homeless families have a high level of complex needs that cannot be met by conventional health services. Local strategies for rapid re-housing into permanent accommodation, effective social support and health care for parents and children, and protection from violence and intimidation should be developed and implemented.

Weinreb L, Goldberg R, Bassuk E, Perloff J. **Determinants of health and service use patterns in homeless and low-income housed children.** Pediatrics, 102(3 Pt 1), Sept 1998.

OBJECTIVE: Previous studies of homeless children have described more health problems and service use than in housed children, but failed to control for potential confounding factors that may differ between these children. This observational study examines the relationship of homelessness and other determinants to health status and service use patterns in 627 homeless and low-income housed children. METHODS: Case-control study of 293 homeless and 334 low-income housed children aged 3 months to 17 years and their mothers conducted in Worcester, Massachusetts. Information was collected about mothers' housing history, income, education, emotional distress, and victimization history. Standardized instruments were administered to assess

children's health. Health service use questions were adapted from national surveys. Main outcome measures included health status, acute illness morbidity, emergency department and outpatient medical visits. Multivariable regression analyses were used to examine the association of family and environmental determinants, including homelessness, with health status and service use outcomes. RESULTS: Mothers of homeless children were more likely to report their children as being in fair or poor health compared with their housed counterparts. Homeless children were reported to experience a higher number of acute illness symptoms, including fever, ear infection, diarrhea, and asthma. Emergency department and outpatient medical visits were higher among the homeless group. After controlling for potential explanatory factors, homeless children remained more likely to experience fair or poor health status (adjusted odds ratio [OR] = 2.83; 95% confidence interval [CI], 1.16, 4.87), and a higher frequency of outpatient (OR = 1.71; 95% CI, 1.18, 2.48) and emergency department visits (OR = 1.21; 95% CI, 0.83, 1.74). Mothers' emotional distress was independently associated with acute illness symptoms and frequent use of outpatient and emergency department settings. CONCLUSIONS: Homelessness is an independent predictor of poor health status and high service use among children. The present findings highlight the importance of preventive interventions and efforts to increase access to primary care among homeless children

Zima BT, Forness SR, Bussing R Benjamin B. **Homeless children in emergency shelters: Need for prereferral intervention and potential eligibility for special education.** Behav Disord, 23(2):98-110, 1998.

This article examines a study whose purpose was to describe the level of need for special education services for probable behavioral disorders, learning disabilities, and mental retardation among school-age homeless children living in shelters. From a county-wide sample of 18 emergency homeless shelters in Los Angeles, 118 homeless parents were interviewed, and 169 children were tested for behavioral disorders, learning disabilities, and mental retardation using standardized screening instruments. Forty-six percent of homeless children screened positive for at least one disability requiring special education services, with behavioral disorders being the most prominent (30%). The authors state that procedures to identify early need for special education services should be adapted to accommodate the transiency of school-age children living in homeless shelters.

Zlotnick C, Kronstadt D, Klee L. **Foster care children and family homelessness.** Am J Public Health, 88(9):1368-70, Sept 1998.

OBJECTIVES: This study examined the association between family homelessness and children's placement in foster care. METHODS: The prevalence of homelessness in a random sample of 195 young foster children was examined. RESULTS: Almost half of the birth parents of the foster children had experienced homelessness. Those children were more likely than other foster children to have siblings in foster care and to be place with non-relatives. CONCLUSIONS: An extremely high prevalence of family homelessness was found among children in foster care. Policy implications of the association between family homelessness and placement into foster care are discussed.

1997

Ali S, Osberg JS. Differences in follow-up visits between African American and white Medicaid children hospitalized with asthma. J Health Care Underserv, 8(1):83-99, Feb 1997.

Asthma-related hospitalizations and mortality have risen at alarming rates in the past two decades, taking a disproportionate toll on African American children. Adverse asthma outcomes have been attributed to inadequacies in primary care, raising concerns about the quality of primary care delivered to African American children. To assess differences in care between African American and white children, the authors identified 500 children enrolled in Massachusetts Medicaid and hospitalized for asthma and reviewed their medical claims data for the six-month period of hospitalization. It was found that African American children had significantly fewer primary care visits than their white counterparts. In contrast, emergency service utilization did not differ by race. The authors conclude that racial disparity exists in primary care access among children with asthma. Interventions should be designed to target poor African American children who suffer disproportionately from this life-threatening yet treatable disease.

Bassuk EL, Buckner JC, Weinreb LF, Browne A, Bassuk SS, Dawson R, Perloff JN. **Homelessness in female-headed families: Childhood and adult risk and protective factors**. Am J Public Health, 87:241-8, Feb 1997.

OBJECTIVES: To identify risk and protective factors for family homelessness, a case-control study of homeless and low-income, never-homeless families, all female-headed, was conducted. METHODS: Homeless mothers (n=220) were enrolled from family shelters in Worcester, MA. Low-income housed mothers receiving welfare (n=216) formed the comparison group. The women completed an interview covering socioeconomic, social support, victimization, mental health, substance use, and health domains. RESULTS: Childhood predictors of family homelessness included foster care placement and mother's use of drugs. Independent risk factors in adulthood included minority status, recent move to Worcester, recent eviction, interpersonal conflict, frequent alcohol or heroin use, and recent hospitalization for a mental health problem. Protective factors included being a primary tenant, receiving cash assistance or a housing subsidy, graduating from high school, and having a larger social network. CONCLUSIONS: Factors that compromise an individual's economic and social resources are associated with greater risk of losing ones home.

Beechinor L, Matsushima K. **The nurse practitioner and homeless adolescents in Waikiki**. Nurse Pract Forum, 8(1):28-31, March 1997.

Staffed by those with advanced skills and training, the nurse practitioner-based clinic is in a unique position to offer the street youth primary health care designed to meet their basic needs. Within the setting of a "drop-in" program in Waikiki, free and confidential medical, educational, and social services are offered to homeless adolescents bound to survival on the streets.

Brooks-Dunn J, Duncan GJ. The effects of poverty on children. The Fut Child, 7(2): 55-71, 1997.

Recent studies explore the relationship between poverty and child outcomes, including the effects of timing, depth, and duration of poverty. Included are results from the Panel Study of Income Dynamics, National Longitudinal Survey of Youth (NLSY), the Children of the NLSY, the National Survey of Families and Households, the National Health/Nutrition Examination Survey, and the Infant Health/Development Program. Although more research is needed on the significance of the timing of poverty on child outcomes, findings suggest that interventions during early childhood may be most important in reducing poverty's impact.

Buckner JC, Bassuk EL. Mental disorders and service utilization among youths from homeless and low-income housed families. J Am Acad Child Adol Psych, 36(7):890-900, July 1997.

OBJECTIVE: To assess the mental health of homeless and poor housed youths, using the National Institute of Mental Health (NIMH) Diagnostic Interview Schedule for Children (DISC) Version 2.3, and to examine mental health service use. METHOD: As part of a comprehensive study of homeless and housed families Worcester, MA, data were collected on 41 homeless and 53 poor housed (never homeless) youths aged 9 to 17 using both the parent and youth versions of the DISC. RESULTS: On the basis of the parent version of the DISC, current (6-month) prevalence rates of DSM-III-R disruptive behavior, affective, and anxiety disorders were comparable in homeless and housed youths but higher than rates found among youths in the NIMH-sponsored Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) Study, which used the same diagnostic measure. Approximately 32% of the combined sample of homeless and housed youths had a current mental disorder accompanied by impairment in functioning. Mental health service use in the preceding 6 months among youths who had one or more current disorders and associated impairment ranged from 20% to 35%. A subgroup of youths with one or more current disorders and poor global functioning had never received treatment. CONCLUSIONS: This sample of homeless and housed youths was found to have high rates of current mental disorders. Use of mental health services by children with mental health needs was low, particularly for youths with poor overall functioning.

Butler SS. Homelessness among AFDC families in a rural state: It is bound to get worse. AFFILIA: J Wom Soc Work, 12(4):427-51, 1997.

Drawing on a sample of 929 recipients of Aid to Families with Dependent Children (AFDC) in Maine, this article examines the differences between families who had and had not experienced homelessness. Results indicated that 15% of those receiving AFDC had been homeless in the past five years. The findings revealed few other differences, between the ever-homeless and never-homeless groups. The author argues that if a significant proportion of the AFDC population has recently been, or is at risk for being, homeless, then the current welfare reforms and elimination of AFDC will only increase the number of homeless families.

Canino IA, Spurlock J. **Mental health issues of culturally diverse underserved children**. J Assoc Acad Minor Phys, 8(4):63-6, 1997.

This article addresses the clinical issues relevant to mental health workers when evaluating children of diverse cultures who live in conditions of persistent poverty. We suggest a model that considers the social as well as the biologic risk factors affecting these children and that includes the importance of culture on symptom expression and health-seeking behavior. The discussion includes specific assessment approaches sensitive to the context in which these children develop and the psychiatric diagnostic entities and treatment approaches thought to be particularly relevant to these children.

Devaney BL, Ellwood MR, Love JM. **Programs that mitigate the effects of poverty on children.** The Fut Child, 7(2):88-112, 1997.

This article reviews six federally funded public assistance programs that are intended to mitigate the effects of poverty on low-income children by providing access to basic human necessities such as food, housing, education, and health care. Programs discussed include food stamps; the Special Supplemental Food Program for Women, Infants, and Children; school nutrition programs; Medicaid; housing assistance programs; and Head Start. The authors state that the evidence suggests that, while each program can be improved, these programs do achieve their general objectives. The authors also state that important gaps remain in the understanding of the effects of these programs on the well-being of children. They conclude that more study is needed, particularly concerning a program's effect over time on health and development.

Ensign J, Santelli J. **Shelter-based homeless youth. Health and access to care**. Arch Pediatr Adolesc Med, 151(8):817-23, Aug 1997.

OBJECTIVES: To compare the self-reported risk-taking behaviors, health status, and access to care issues of two samples of shelter-based homeless youth who had previously been street youth and systems youth (youth involved in foster care) and to examine information on the etiology of homelessness, including parent or family of origin risk factors for both samples. DESIGN: The study population consisted of 109 shelter-based homeless youth: 41 street youth and 68 systems youth. A chart audit was completed on all youth, noting documentation of past health problems, reasons for shelter placement, and parental risk factors. Adolescents from both samples completed a health history questionnaire followed by a physical examination. RESULTS: The street youth exhibited greater risk-taking behaviors and suffered from poorer health status and access to care than did systems youth. The main differences were in substance using and high-risk sexual behaviors. The street youth were more likely to report previous exposure to violence and having been victims of forced sex. Self-reported risk behaviors, including sexual activity and substance abuse were corroborated by more objective information on these items from medical record information. The street youth were more likely to be medically uninsured, to have used an emergency department in the past year, and to have used an emergency department for their last care. CONCLUSIONS: There are important variations in health needs between samples of homeless youth, often overlooked in health planning for this population. Knowledge of parent or family of origin risk factors and causes of homelessness provides important contextual information for understanding the risk behaviors and health states of homeless youth.

National Center for Children in Poverty. **Poverty and brain development in early childhood.** New York, NY: National Center for Children in Poverty, Columbia School of Public Health, 1997.

Recent advances in the study of brain development show a sensitive period when the brain is most able to respond to and grow from exposure to environmental situation. This window is from the prenatal period to the first years of a child's life. While all children are potentially vulnerable to a number of risk factors which can impede brain development during this period, a disproportionate number of children in poverty are actually exposed to such risks. These risks can include inadequate nutrition, substance abuse, maternal depression, exposure to environmental toxins, trauma/abuse, and the quality of daily care.

Rorie JA, Richardson KA, Gardner R. Public health approaches to community-based needs. Boston's infant mortality crisis as a case study. J Nurs Midwif, 42(6):527-35, Nov 1997.

In light of a 10-year infant mortality crisis in Boston, a comprehensive public health approach was undertaken in which an extensive community-based needs assessment was used to develop a citywide maternal and child health improvement agenda. On the basis of the needs assessment, recommendations were made calling for community-based perinatal initiatives and midwifery services as critical elements in care for underserved communities and enhancement of perinatal services. A case description of one perinatal initiative illustrates the challenges of public health practice and describes a practice setting in which midwives provided leadership and guidance by using an interdisciplinary team approach in the implementation of a community empowerment project.

Soderstrom E, Long T, Sherman J. **MOVES: Incorporating developmental services on a pediatric mobile health care clinic.** Infa Young Childr, 9(3):78-86, 1997.

The Mobile Van Evaluation and Screening (MoVES) program was established in 1994 to provide developmental screening and evaluation services to the children receiving primary pediatric medical care from the Georgetown University Pediatric Mobile Clinic. The program grew rapidly and presently consists of an array of developmental services in addition to evaluation and screening. The purpose of this article is to describe the developmental services that have been established as part of a pediatric mobile health care clinic. A descriptive analysis of the children seen during the first year of the program will also be provided.

Stein R. (ed). **Health care for children: What's right, what's wrong, what's next?** New York, NY: United Hospital Fund, 1997.

With contributions from leading experts in the fields of pediatrics, public health, and health policy, this book lays out the components of a rationalized system of care for children, one that would provide better and more consistent access to care for all of them. It offers a range of options, including descriptions of innovative approaches and model programs, providing a practical resource for legislators, health care professionals, and advocates. An argument is made for a uniform standard of care for all children, as well as sustained investment in public health and pediatric research and education.

Stroul BA, Pires SA, Roebuck L, Friedman RM, Barrett B, Chambers KL, Kershaw MA. **State health care reforms: How they affect children and adolescents with emotional disorders and their families.** The J Ment Health Admin, 24(4):386-99, 1997.

This article reports on the Health Care Reform Tracking Project, a national study designed to describe and analyze state health care reforms and their impact on children and adolescents with emotional disorders and their families. The authors summarize the results of the baseline survey of states conducted in 1995, exploring the nature and extent of the reforms in which states are engaged, most of which involve applying managed care technologies to their Medicaid programs. Trends across states are identified with respect to mental health service delivery, particularly with respect to children and adolescents. The authors conclude with a discussion of issues and concerns related not only to mental health service delivery for children and adolescents with emotional disorders and their families, but also to the systems of care that have been developing over the past decade to serve them.

Vostanis P, Grattan E, Cumella S, Winchester C. **Psychosocial functioning of homeless children**. J Am Acad Child Adolesc Psych, 36(7):881-9, July 1997.

OBJECTIVE: To investigate the psychosocial characteristics of homeless children and their parents. METHOD: Homeless families were assessed within 2 weeks of admission to seven hostels and were compared with a group of housed families matched for socioeconomic status. Measures included a semistructured interview, the General Health Questionnaire (GHQ), the interview Schedule for Social Interaction, the Child Behavior Checklist (CBCL), the Communication domain of the Vineland Adaptive Behavior Scales, and height and weight percentiles. The sample consisted of 113 homeless families (249 children aged 2 through 16 years) and 29 comparison families (83 children). RESULTS: Homeless families primarily consisted of single mothers and an average of two children, who had become homeless because of domestic violence (56%) or violence from neighbors (29%). Homeless mothers reported high rates of previous abuse (45%) and current psychiatric morbidity (49% caseness on the GHQ) and poor social support networks compared with housed controls. Homeless children were more likely to have histories of abuse, living in care, and being on the at-risk child protection register and less likely to have attended school or a preschool/day-care center since admission to the hostel. They also had delayed communication and higher CBCL scores. Maternal GHO scores best predicted CBCL caseness. CONCLUSIONS: Homeless mothers and children have high rates of psychosocial morbidity, which are related to multiple risk factors and chronic adversities. Their complex needs should be best met by specialized and coordinated health, social, and educational services.

Zima BT, Bussing R, Forness SR, Benjamin B. **Sheltered homeless children: Their eligibility and unmet need for special education evaluations.** Amer Jl of Pub Health 87(2):236-48, 1997.

The authors describe a study that explored the proportion of sheltered homeless children in Los Angeles who were eligible for special education evaluations because of a probable behavioral disorder, learning disability, or mental retardation and had unmet needs for special education services. Results show almost half of the children met criteria for a special education evaluation, yet less than one quarter had ever received special education testing or placement. The main point of contact for children with behavioral disorders and learning problems was the general health care sector. The authors explain that school-aged sheltered homeless children have a high level of unmet need for special education evaluations, the first step toward accessing special education programs. The authors contend interventions for homeless children should include integration of services across special education, general health care, and housing service sectors.

1996

American Academy of Pediatrics, Committee on Community Health Services. **Health needs of homeless children and families.** Pediatrics, 98(4 Pt 1):789-91, Oct 1996.

The intent of this statement is to substantiate the existence of homelessness in virtually every community, illustrate the pervasive health and psychosocial problems facing the growing population of children who are homeless, and encourage practitioners to include homeless children in their health care delivery practices, social services, and advocacy efforts. The recommendations will guide practitioners in taking actions to diminish the severe negative impact that living in temporary shelters has on the health and well-being of developing children. In this statement the American Academy of Pediatrics reaffirms its stance that homeless children need permanent dwellings in order to thrive.

Committee on Community Health Services. **Health needs of homeless children and families.** Pediatrics, 98(4):789-91, Oct 1996.

This article attempts to substantiate the existence of homelessness in virtually every community, illustrate the pervasive health and psychosocial problems facing the growing population of children who are homeless, and encourage practitioners to include homeless children in their health care delivery practices, social services, and advocacy efforts. The recommendations will guide practitioners in taking actions to diminish the severe negative impact that living in temporary shelters has on the health and well-being of developing children. In this statement, the American Academy of Pediatrics reaffirms its stance that homeless children need permanent dwellings in order to thrive.

Health needs of homeless children and families. American Academy of Pediatrics, Committee on Community Health Services. Pediatrics, 98:789-91, Oct 1996.

This statement substantiates the existence of homelessness in virtually every community, illustrates the pervasive health and psychosocial problems facing the growing population of children who are homeless, and encourages practitioners to include homeless children in their health care delivery practices, social services, and advocacy efforts. The recommendations will guide practitioners in taking actions to diminish the severe negative impact that living in temporary shelters has on the health and well-being of developing children. This statement reaffirms its stance that homeless children need permanent dwellings to thrive.

Joseph CL, Foxman B, Leickly FE, Peterson E, Ownby D. **Prevalence of possible undiagnosed asthma and associated morbidity among urban schoolchildren**. J Pediatr, 129:735-42, Nov 1996.

OBJECTIVE: The extent to which urban children endure the symptoms and consequences of asthma without a physician diagnosis has not been well studied. Our objective was to obtain an estimate of the prevalence of possible undiagnosed asthma in a population of urban schoolchildren. DESIGN AND METHODS: A population-based cross-sectional study was conducted in urban schoolchildren, grades three to five. Undiagnosed asthma was defined as caretaker report of symptoms and/or bronchial hyperresponsiveness, defined as a 15% or greater drop in baseline forced expiratory volume in one second, after exercise challenge. RESULTS: A total of 230 children participated in the study. Forty children had reports of a physician diagnosis of asthma. Of these, 33 reported wheezing in the past 12 months. Among the remaining 189 eligible children, 11 met study criteria for undiagnosed asthma based on bronchial hyperresponsiveness (BHR). Another 16 met study criteria for undiagnosed asthma through modified American Thoracic Society symptom criteria. Overall, 27 children fulfilled criteria for undiagnosed asthma. Children identified as having undiagnosed asthma were compared with children who had no BHR and no symptoms and who did not report a physician diagnosis of asthma Children with BHR were more likely to have a report of allergies and eczema than children without asthma. Children meeting symptom criteria were more likely to have a report of allergies and bronchitis and were more likely to report sleep disruption and missed physical education classes, compared with children without asthma. CONCLUSIONS: We estimated a prevalence of 14.3% for possible undiagnosed asthma among urban schoolchildren, grades three to five, through caretaker report of symptoms or BHR postexercise challenge. Children with undiagnosed asthma reported more atopic disease than children without asthma. In addition, children meeting symptom criteria for asthma reported more bronchitis, sleep disruption, and missed physical education classes than did those without asthma. These results suggest that rates of undiagnosed asthma may be high in this predominantly black school-age population.

Shane PG. What about America's homeless children? Thousand Oaks, CA: Sage Publications, 1996.

This book examines the social factors that create homeless situations for children and the personal and educational problems that can result from them. The health risks - including unsanitary living conditions, poor nutrition, physical assault, and lack of access to health care - are explored. Also presented are ethnographic case studies of children in urban shelters, families in a shelter program, and people who "survived" a homeless youth experience. The history of programs, both governmental and nongovernmental, and policies for homeless youth are also examined. The book concludes with recommendations for policies and programs that can prevent homelessness for children. AVAILABLE FROM: Sage Publications, Inc., 2455 Teller Road, Thousand Oaks, CA 91320, (805) 499-0721. (COST: \$26.00) (ISBN 0-8039-4983-9)

United States Department of Health and Human Services. **Linking community health centers with schools serving low income children: An idea book.** Washington, DC: U.S. Dept. of Health and Human Services, Bureau of Primary Health Care, June 1996.

This guide is designed to promote linkages between schools and community and migrant health centers by providing practical information from school health and education professionals who have collaborated to meet the challenges of supporting children to be ready to learn and achieve their full potential. It includes initial overview, "nuts and bolts" of program design and implementation (e.g., parent involvement, needs assessment, funding and reimbursement, staffing issues, confidentiality, and evaluation), sample forms, contact information, and selected site profiles. Presents linkage models that have worked despite obstacles.

1995

Fitzgerald H, Lester B, Zuckerman B (eds). **Children of poverty: Research, health, and policy issues.** New York, NY: Garland, 1995.

This volume focuses on research, health care, and public policy issues as they impact on children of poverty that must be addressed by developmentalists as society begins to articulate its agenda for the twenty-first century. The thirteen chapters of this book are organized into three sections, one for each of the intended audiences of this book. The section, titled Research Agenda, is designed to promote greater policy-relevant research by developmental psychologists. The second section, titled Health Care Agenda, has a multidisciplinary orientation to underscore the need for collaborative work. And the third section addresses the Public Policy Agenda, in which contributors consider the broader implications of research.

Foltin GL. Critical issues in urban emergency medical services for children. Pediatrics, 96:174-9, 1995.

In order to be effective those wishing to improve emergency care of children in an urban environment must be aware of barriers as well as resources. Urban children are at high risk for requiring emergency care as a result of both illness and injury. These children face a dangerous environment resulting from the problems of poverty, homelessness, overcrowded living conditions, drug abuse, and a shrinking tax base. They face this nation's highest rates of violent injury (intentional and unintentional), immunization delays, and preventable infectious diseases such as TB and measles. In addition, they have poor access to quality primary health care and suffer the greatest morbidity rates from chronic diseases such as asthma and diabetes. On the other hand, there is great opportunity to ensure that urban children receive quality emergency health care. The urban environment is rich in "centers of pediatric excellence," which often have paid full-time EMS systems in

operation, and is the locale in which the majority of pediatric emergency medicine specialists and pre-hospital advanced life support providers practice. The child advocate must work to ensure that the urban child can benefit from these resources.

Norton D, Ridenour N. **Homeless women and children: The challenge of health promotion**. Nurse Pract Forum, 6:29-33, March 1995.

Women and children represent an ever-increasing percentage of the homeless population. Care of homeless women and their children presents a challenge to all health care providers. This article describes the benefits and obstacles to the adoption of health promotion behaviors in these populations. Nurse practitioners are challenged to balance the emergent crisis-oriented needs of many health care encounters with the homeless with the profound need for these populations to develop healthy living habits.

Pires SA, Stroul BA, Roebuck L, Friedman RM, McDonald BB, Chambers KL. Health care reform tracking project: Tracking state health care reform as they affect children and adolescents with emotional disorders and their families, the 1995 state survey. Tampa, FL: Research and Training Center for Children's Mental Health, 1995.

This is the only national study tracking state health care reforms that is focused specifically on the effects of health care reforms on adolescents and children with emotional disorders and their families. This project is particularly concerned with investigating the impact of state health care reform activity on the interagency systems of care for these juveniles and families. Topics include: general information about state health care reforms; populations affected by state health care reforms; mental health carve outs; coverage for children with serious emotional disorders; capitation; risk adjustment; entities used to manage and provide services; management and monitoring mechanisms; outcomes; and technical assistance materials.

Riemer J, Van Cleve L, Galbraith M. **Barriers to well child care for homeless children under age thirteen.** Pub Health Nurs, 12(1):61-6, 1995.

Barriers perceived by homeless families to preventive health care for their children under age 13 have been undocumented. This descriptive study was designed to identify perceived barriers to care and to determine if there was a relationship between perceived barriers and duration of the family's homelessness. Using an investigator-modified version of Melnyk's Barriers Scale and a demographic measure, a convenience sample of homeless families (n=53) from three transitional shelters was surveyed via questionnaire. Four barriers were cited most frequently by the respondents as greatly affecting their children's care. These barriers involved provider-selection difficulties, waiting for well child appointments, waiting during well child appointments, and the high cost of transportation and/or parking. No relationship was found between duration of homelessness and perceived barriers. These findings confirm the reality of potential barriers to care suggested by earlier studies. Innovative forms of health care delivery that may reduce or eliminate these barriers include the use of shelter-site clinics, mobile units, and the use of a nurse liaison between family shelters and hospital-based clinics.

1994

Burg MA. Health problems of sheltered homeless women and their dependent children. Health Soc Work, 19:125-31, May 1994.

This article introduces an analytic framework that classifies the types of health problems that emerge among shelter residents and serves as a guide to social work intervention with the health problems of shelter residents. It covers three categories of health problems: illness coincident with homelessness; illness exacerbated by limited health care access; and illness associated with psychosocial burdens of homelessness. The failures of the current structure of the health care reimbursement and the deficiencies of service delivery to homeless families are discussed. The analytic framework conceptualizes the interrelationship between health and poverty. It can be used as a tool for social work intervention, advocacy, training, and research.

Lipman EL, Offord DR, Boyle MH. Relation between economic disadvantage and psychosocial morbidity in children [see comments]. Can Med Assoc J, 151:431-7, Aug 15, 1994.

OBJECTIVE: To examine the relation between low income and child psychosocial morbidity cross-sectionally and longitudinally. DESIGN: Cross-sectional survey with follow-up. SETTING: Ontario. PARTICIPANTS: Children aged four to 16 years from families selected by means of stratified, clustered and random sampling of 1981 Canada Census data. Results were based on the responses of 2503 children interviewed in 1983 and 1076 re-interviewed in 1987. OUTCOME MEASURES: Prevalence rates of psychiatric disorders, poor school performance and social impairment. RESULTS: There was a significant relation between low income and psychosocial morbidity, with a threshold at an income level of less than \$10,000. Poor children four to 11 years of age were at greater risk of morbidity than poor children 12 to 16, but there were no significant age differences. Logistic regression revealed that low income and non-economic factors (low maternal education and family dysfunction) shared significant independent influences on the prevalence of psychosocial morbidity. CONCLUSIONS: Low income is strongly associated with psychosocial morbidity in children. Both economic and non-economic factors showed independent influences on morbidity. These findings have important clinical, scientific and policy implications.

McNamee MJ, Bartek JK, Lynes D. **Health problems of sheltered homeless children using mobile health services.** Issues Compr Pediatr Nurs, 17:233-42, Oct-Dec 1994.

Homeless families are increasing in the U.S. Children represent 34% of the total homeless population. This retrospective study describes the demographic characteristics and health care problems of sheltered homeless children who used the services of a mobile health van over a one-year period in a mid-western metropolitan area. Patterns of utilization, medications, and referrals are described. Medical records of 175 sheltered homeless children who sought care from a mobile health van were reviewed. Forty-eight percent of the children were female; 52% were male. The majority were under six years of age (15% infants, 22% toddlers, 22% preschoolers, 23% school-age children, and 18% adolescents). The major reasons for seeking health care, primary diagnoses, and treatments are presented. Recommendations for using a mobile van to provide efficient, quality care for this population, are discussed.

Olvera-Ezzell N, Power TG, Cousins JH, Guerra AM, Trujillo M. **The development of health knowledge in low-income Mexican-American children.** Child Dev, 65:416-27, April 1994.

Children growing up in poverty are at risk for various health problems. For low-income, Mexican-American children, these risks include obesity, diabetes, and accidental injuries, three conditions that can largely be prevented by healthy lifestyles. Despite the potential for prevention through education leading to health-promoting behaviors, very little is known about the development of health knowledge in this population. The study examined low-income, Mexican-American children's understanding of the relation between health behavior and health status in three areas: nutrition, hygiene, and safety. Seventy-nine children (41 boys, 38 girls) ages four to eight years participated. Children's knowledge was assessed in a structured play situation. Results revealed that children knew the least about the relation between food consumption and their health, and knew the most about beneficial and harmful practices in the areas of safety and hygiene. Age and gender differences were also significant, with girls and older children more likely to provide elaborate and complex rationales for their responses. Implications of the findings for understanding the role of cognitive development and experience in the development of health knowledge are considered.

Redlener I, Karich KM. The Homeless Child Health Care Inventory: Assessing the efficacy of linkages to primary care. Bull N Y Acad Med, 71(1):37-48, Summer 1994.

Each year, the New York City homeless family shelter system provides transitional housing for nearly 20,000 homeless children. While the health care needs of these children are substantial, there is currently no system-wide mechanism for ensuring that they have access to appropriate medical care. This report analyzes information from the Homeless Child Health Care Inventory, a survey conducted by Montefiore Medical Center's Division of Community Pediatrics, to examine the adequacy of health care resources available to the homeless children in New York City. Results showed that available health care resources varied considerably throughout the shelter system and that nearly 50% of homeless children in New York City did not have access to appropriate medical care.

Redlener I, Redlener K. System-based mobile primary pediatric care for homeless children: The anatomy of a working program. Bulletin of the New York Academy of Medicine, 49-57, Summer 1994.

This article describes the New York Children's Health Project (NYCHP) of Montefiore Medical Center-Albert Einstein College of Medicine in Bronx, NY. The project has been providing comprehensive health services to homeless and medically underserved children since 1987. Fully equipped mobile child health offices have been the principal mechanism for bringing pediatrician-led teams to locations that are convenient and accessible to underserved children and their families.

Taylor J. Access to health care for children in low-income families. Aust J Public Health, 18:111-3, March 1994.

This paper draws on data from the Health Care for Children Project to consider issues of access to health care for children in low-income families in three geographic areas. Group and individual interviews were held with mothers in an inner city area and two outlying suburbs. Financial, geographic, socio-cultural and other barriers to use of health services are discussed. Major obstacles to access to health care for their children identified by the mothers included cost of medication, hours of opening, transport and language. The paper highlights the impact of even quite small charges for health services on low-income families.

Wagner JD, Menke EM, Ciccone JK. The health of rural homeless women with young children. J Rur Health, 10(1):49-57, Winter 1994.

More than 30 percent of the homeless are families with children; however, little is known about these families, particularly rural homeless mothers with children. The purpose of this study was to describe the characteristics of rural homeless mothers, their physical and mental health, and their health care practices. A descriptive cross-sectional design was used to study a sample of 76 rural mothers with children younger than age 13. An interview schedule and the SCL-90-R were used to collect data about these families. The majority of the families had been homeless for more than four months, 46 percent were woman-headed, 17 percent of the mothers reported having a physical health problem, and only 3 percent had scores on the SCL-90-R that were indicative of needing additional evaluation for possible mental health problems. The use of drugs was higher than expected, which puts both the mothers and their children at risk for health problems.

Ziesemer C, Marcoux L, Marwell BE. **Homeless children: Are they different from other low-income children?** [published erratum in Soc Work, 40(1):141, January 1995] Soc Work, 39:658-68, Nov 1994.

This study examines the differences in academic performance, adaptive functioning, and problem behaviors of 145 elementary school-age children who had experienced homelessness and a matched group of 142 mobile children with low socioeconomic status (SES). The Achenbach and Edelbrock Teacher Report Form and the Harter Self-Perception Profile for Children were used. Within groups, children displayed a range of academic and psychological functioning; about 30% performed in the normal range. Comparisons revealed no significant differences between homeless and low SES-mobile children. However, the children's scores taken together differed substantially from norms. These findings suggest that although homelessness is a stressful event in children's lives, long-term poverty may be a more appropriate marker of risk in children. Further, the findings imply that interventions must presume a substantial diversity of need within the various populations. A model of the dynamic of poverty, mobility, and lack of social supports is presented. Implications for intervention by schools and community agencies are discussed.

1993

Bassuk EL, Weinreb LF. **Homeless pregnant women: Two generations at risk.** Am J Orthopsychiatry, 63(3):348-57, July 1993.

The impact of pregnancy on the course of homelessness and the adverse effects of homelessness on pregnant women and their babies are explored. Recommendations for policy to address the urgent needs of this population are offered, and components of an innovative three-site demonstration program are described.

Farkas GS, Yorker B. Case studies of bibliotherapy with homeless children. Issues Ment Health Nurs, 14(4):337-47, Oct 1993.

Children who experience homelessness constitute a growing population at-risk for developing mental health problems. The purpose of this study was to explore and describe the use of bibliotherapy with homeless children. A case study method of inquiry was used with drawings, audiotapes and clinical records from a convenience sample of three children living in a transitional homeless shelter. Four themes of homelessness emerged from the case studies. These were labeled "Longing for Affluence," "Escaping Violence," "Shame and Stigma," and "Making Transitions." Therapeutic stories were selected in response to the emergence of each child's own issues and the theme issues. Implications for psychiatric mental health nurses are discussed.

Fierman AH, Dreyer BP, Acker PJ, Legano L. Status of immunization and iron nutrition in New York City homeless children. Clin Pediatr (Phila), 32(3):151-5, March 1993.

A retrospective review of the hospital records of New York City children aged 6 months through 6 years showed that 63 homeless children had a higher rate of immunization delay than an age- and sex-stratified sample of 63 domiciled children living at the same federal poverty level. In a logistic regression model, this difference persisted after controlling for sex, age, ethnicity, presence of chronic illness, and reason for referral. In a 6-month- to 2-year-old subgroup, homeless and domiciled children had equal rates of anemia, but homeless children were more likely to have elevated erythrocyte protoporphyrin (EP) levels consistent with iron deficiency. This difference, too, persisted after controlling for the same confounding factors. Elevated EP levels and immunization delay were likely to coexist in the homeless children. The higher rate of immunization delay is compatible with the occurrence of measles outbreaks in some New York City shelters. The higher rates of iron deficiency may reflect overall poor nutrition. All these findings have significant implications for the design of health-care programs for homeless children.

Johnston RB Jr. Academic pediatrics and the health of medically underserved children in America. Am J Dis Child, 147:514-5, May 1993.

Kemsley M, Hunter JK. **Homeless children and families: Clinical and research issues**. Issues Compr Pediatr Nurs, 16(2):99-108, April 1993.

This paper describes challenges associated with providing health care to homeless children and evaluation of those services. Data are presented from the Nursing Center for the Homeless of the School of Nursing at the State University of New York at Buffalo. Health services provided to homeless children and families documented that more than half were covered by health insurance and had received age-appropriate preventive health care. Of the children seen, 50% were considered well and 30% were diagnosed as having upper respiratory infections, skin problems, and/or gastrointestinal disorders. Health teaching for parents was the most frequent nursing intervention, while 20% of the children were referred to community agencies. Factors that impede data collection and provision of health services for the homeless population are discussed, including suggestions for treatment and research approaches.

Lissauer T, Richman S, Tempia M, Jenkins S, Taylor B. **Influence of homelessness on acute admissions to hospital.** Arch Dis Child, 69(4):423-9, Oct 1993.

A prospective case-controlled study was performed on all homeless children admitted through the accident and emergency department over one year, comparing them with the next age matched admission from permanent housing. Assessments made were: whether homelessness or other social factors influenced the doctors' decision to admit; differences in severity of illness; length of stay; and use of primary care. The admitting doctors completed a semi-structured questionnaire during admission about social factors that influenced their decision to admit and graded the severity of the child's illness. The length of hospital stay was recorded. The family's social risk factors and accommodation were assessed at a home visit using a standardized questionnaire and by observation. Seventy homeless children were admitted. Social factors influenced the decision to admit in 77% of homeless children and 43% of controls. More of the homeless children were only mildly ill than those from permanent housing, although three of the homeless children died of overwhelming infections compared with none of the controls. Among homeless families, many were recent immigrants. There was a marked increase in socioeconomic deprivation, in major life events in the previous year, and in maternal depression. Referral to the hospital was made by a general practitioner in only 5/50 of homeless compared with 18/50 of controls.

Masten AS, Miliotis D, Graham-Bermann SA, Ramirez M, Neemann J. **Children in homeless families: Risks to mental health and development**. J Consult Clin Psychol, 61:335-43, April 1993.

This study examined the psychological adjustment of 159 homeless children in comparison with a sample of 62 low-income children living at home. In each group, ages ranged from eight to 17 years. Homeless children were found to have greater recent stress exposure than housed poor children, as well as more disrupted schooling and friendships. Child behavior problems were above normative levels for homeless children, particularly for antisocial behavior. Across the two samples, however, behavior problems were more related to parental distress, cumulative risk status, and recent adversity than to housing status or income. Results suggest that homeless children share many of the risks and problems of other American children being reared in poverty.

Page AJ, Ainsworth AD, Pett MA. Homeless families and their children's health problems. A Utah urban experience. West J Med, 158:30-5, Jan 1993.

Descriptive information was obtained about homeless families in the Intermountain West and their children's health care needs were defined to help professionals develop programs tailored to meet the unique needs of this population. We collected data during the well-child visits of 306 children in 161 families living at the Travelers Aid Society family shelter. Each requires different levels of assistance. This study's profile of mobile, predominantly white, two-parent families with few children differs considerably from that of studies conducted on the East and West coasts. The families' nomadic lifestyle present important public health issues, especially because of the recent resurgence of tuberculosis and declining levels of childhood immunizations. The children's health problems were similar to those reported nationally: delayed immunizations, dental decay, anemia, and impaired vision.

Primas PJ, Baca G, Petticrew DA, Moffett C, White JK, Primas HR, Norman S. A multi-dimensional assessment of the health needs of homeless infants and pre-school children in Phoenix. J Soc Distr Homel, 2(1):61-72, 1993.

The dual purpose of this study was to identify the comprehensive health needs of a selected group of homeless children in Phoenix, Arizona, and to utilize the findings in developing needed services. A non-random sample of 60 infants and pre-school children was given on-site physical, dental, developmental, behavioral, and nutritional assessments. Fifty-eight of the 60 children screened needed further evaluation, treatment, or follow-up services. The most significant problems included low hematocrit readings, inadequate immunizations, and untreated medical and dental problems specific to this age group. Also identified were developmental delays and potential behavior problems.

Velsor-Friedrich B. Homeless children and their families, Part II: Federal programs and alternative health care delivery systems. J Pediatr Nurs, 8:190-2, June 1993.

Wagner J, Melragon B, Menke EM. **Homeless children: Interdisciplinary drug prevention intervention**. J Child Adolesc Psychiatr Ment Health Nurs, 6(1):22-30, Jan 1993.

Homelessness among children has been called a national tragedy. Homeless children, by virtue of their unique situation, are particularly vulnerable for early initiation of and sustained participation in substance abuse behaviors. The authors describe homeless children in relation to drug abuse etiology research, discuss current prevention strategies, suggest necessary components of an interdisciplinary prevention curriculum for homeless preschool children, and delineate methods for delivering the curriculum to the children. Nurses, given their unique role in the healthcare delivery system as well as a holistic world-view, are in an unparalleled position to facilitate the design and implementation of such curricula.